

MOTHS OF THE FAMILY ÆGERIIDÆ OCCURRING
IN OREGON, WITH NOTES

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The object of this paper is to place on record the results of the writer's collecting in this group for the past ten years. Reference is made to recent publications on species occurring in Oregon as well as to original descriptions of the species known to occur in the state. The host plants are also given, when known. Twenty species of this family are recorded as occurring in Oregon. Of these, the writer has collected seventeen species. Many of the species occurring in the state are pests of major importance. The western peach and prune root borer, so prevalent and so destructive to our peach and prune plantings in Oregon, belongs to this group, as does also the loganberry crown borer, an insect very injurious to brambles; the strawberry crown borer, a major pest of strawberries, and many other important pests of the forest and orchard. The very fact that the larvæ of all the species occurring in Oregon are internal plant feeders ranks them as potential pests of major importance.

1. BEMBEZIA MARGINATA Harris¹

Harris, 1839, Am. Journal Arts & Sciences, vol. XXXVI:309.

A. L. Lovett, 1921, 3rd Crop Pest Rept., Oregon, pages 119-20.

B. G. Thompson, 1927, Ore. State Board of Hort., 19th Bienn. Rept., page 127.

This species is common throughout the Willamette Valley. The larvæ work in the roots and crowns of blackberry and loganberry.

The writer has collected a large series of specimens from the following localities: Junction City, Molalla, Lacombe, Beaverton, Forest Grove, Albany, Corvallis and Shedd. The adults are present during August and September.

2. AEGERIA TIBIALIS Harris

Harris, 1839, Am. Journal Arts & Sciences, vol. XXXVI:306.

B. G. Thompson, 1927, Ore. State Board of Hort. 19th Bienn. Rept., page 128.

This species is common throughout the state. The larvæ work in poplar.

¹ Species arranged according to Barnes and McDunnough's Check List of the Lepidoptera of Boreal America.

Corvallis VI-30-'18, ♂, 2 ♀ ♀ (B. G. T.); Burns V-25-'19, ♂ and ♀ (B. G. T.); Pendleton VII-1-'19 ♀ (B. G. T.).

3. SYNANTHEDON OPALESCENS Hy. Edw.

Hy. Edwards, 1881, Papilio, vol. I:199.

Lathrop and Black, 1921, 3rd Crop Pest Rept., Oregon, pages 59-70.

Don C. Mote, 1923, Ore. Agric. College & Expt. Station, Cir. 50.

B. G. Thompson, 1927, Ore. State Board of Hort. 19th Bienn. Rept., pages 133-135.

This species is quite common throughout Oregon and is very destructive to peaches and prunes. It has been reported as doing damage in the following localities: Salem, McMinnville, Goshen, Newberg, Dixonville, Roseburg, The Dalles, Yoncalla, Dallas, Yamhill, Estacada, Silverton, Tolo, Oakland, Eugene, Crabtree, Freewater, Marion, Portland, Turner, Umpqua, Dundee, Rex, Macleay, Shaw, Days Creek, Sheridan, Sutherland, Scotts Mills, Monmouth, Albany, Cleveland, Carlton, Myrtle Creek, Riddle, Rickreall, Gervais, Reston, Lebanon, Dayton, Medford, Forest Grove, Independence, Gaston, Kellogg, Corvallis, Mosier, Aumsville, Amity, Beaverton, Creswell, Springfield, Dufur, Willamina, Hillsboro, Jefferson, Worden, Laurel, Oregon City, Looking Glass, Ruckles, Astoria, Suver and Monroe.

4. SYNANTHEDON RILEYANA Hy. Edw.

Hy. Edwards, 1881, Papilio, vol. I:187.

Beutenmuller, 1898, Memoirs Am. Mus. of Nat. Hist., vol. VI:280.

Beutenmuller reports this species as occurring in Oregon.

5. SYNANTHEDON GRÆFI Hy. Edw.

Hy. Edwards, 1881, Papilio, vol. I:183.

Rather rare in the state. The writer has collected it in two localities, one in an old abandoned prune orchard, the other on cherries grafted on Mahaleb root stock.

Corvallis, VI-20-'18, 2 ♀ ♀ (B. G. T.); Lebanon, VI-1-'25, 2 ♀ ♀ (B. G. T.).

6. SYNANTHEDON BIBIONIPENNIS Bosid. (*S. rutilans*)

Bosiduval, 1869, Ann. Soc. Ent. Belgique, vol. XII:64.

Hy. Edwards, 1881, Papilio, vol. I:186.

B. G. Thompson, 1927, Ore. State Bd. of Hort. 19th Bienn. Rept., page 129.

G. P. Engelhardt, 1928, Bull. Brooklyn Ent. Soc., vol. XXIII:67.

This species is quite destructive to strawberries. The larvæ bore within the crowns and main tap roots. According to the records of the Oregon Experiment Station it has been reported as doing damage to strawberries in the following localities: Roseburg, Oakland, Hood River, Ballston, Monmouth, Milwaukie, Brownsville, Cottage Grove, Freewater, Hillsboro, Davidson, Melrose, Canby, Edenbower, Portland, Corvallis, Forest Grove, Lebanon, Sherwood, Silverton, Woodburn, Scio, Rickreall, Rex, Newberg, Pendleton, Albany, Oregon City, Junction City, Salem, Orenco, Springbrook, Hullt, Hillsdale, Dorena, Dayton, Creswell, Warren, Sutherlin, Lorane, Dallas, Turner, Reedsport, Eagle Creek, Stanfield, Sheridan, Talent, Lyons and Beaverton.

7. SYNANTHEDON NEGLECTA Hy. Edw.

Hy. Edwards, 1881, Papilio, vol. I:197.

A species rather hard to separate from *S. bibionipennis*. The adults appear somewhat later than *S. bibionipennis*. The writer has observed the adults depositing eggs on blackberry.

Corvallis, July 14 to August 30, 1927, 200 specimens ♂ ♂ and ♀ ♀ (B. G. T.).

8. SYNANTHEDON TIPULIFORMIS Clerck

Clerck, 1759, Icones Insect. Rariorum, pl. IV, fig. 1.

Linnæus, 1761, Fauna Suecia, page 289.

B. G. Thompson, 1927, Ore. State Board of Hort. 19th Bienn. Rept., page 130.

One of the most common and most cosmopolitan species, occurring pretty generally throughout the world. The larvæ of this species work in the canes of currents and gooseberries.

Albany, V 1-'16, 10 ♂ ♂ and ♀ ♀ (B. G. T.); Corvallis, V-10-'18, 2 ♂ ♂ and 3 ♀ ♀ (B. G. T.).

9. SYNANTHEDON NOVAROENSIS Hy. Edw.

Hy. Edwards, 1881, Papilio, vol. I:199.

B. G. Thompson, 1927, Ore. State Board of Hort. 19th Bienn. Rept., page 131.

This species is common at Corvallis working in Douglas fir and Norway spruce.

Corvallis, VII-4-'16, 2 ♂ ♂, ♀ (B. G. T.); Corvallis, VII-13-'16, ♂ (B. G. T.); Eugene, VI-15-'18, 2 ♂ ♂ and ♀ (B. G. T.).

10. SYNANTHEDON SAXIFRAGÆ Hy. Edw.

Hy. Edwards, 1881, Papilio, vol. I:190.

We have seen but one specimen of this species taken in the state. It was collected at Forest Grove.

Forest Grove, VI-6-'18, ♀ (M. C. Lane).

11. SYNANTHEDON ALBICORNIS Hy. Edw.

Hy. Edwards, 1881, Papilio, vol. I:201.

The larvæ of this species work in willows.

Corvallis, VII-15-'18, 2 ♂ ♂, ♀ (B. G. T.); Forest Grove, VI-30-'20, ♀ (B. G. T.); Ten Mile, VII-1-'26, ♀ (E. McKinney).

12. SYNANTHEDON AMERICANA Beut.

Beutenmuller, 1894, Bull. Am. Museum Nat. History, vol. VI:93.

B. G. Thompson, 1927, Ore. State Board Hort. 19th Bienn. Rept., page 132.

The larvæ work in the cambium and heart wood of alder.

Bend, V-20-'19, 5 ♂ ♂ and 4 ♀ ♀ (B. G. T.); Tumalo, V-25-'19, ♀ (B. G. T.).

13. SYNANTHEDON TACOMA Beut.

Beutenmuller, 1898, Jour. New York Ent. Society, vol. VI:240.

G. P. Engelhardt, 1924, Bull. Brooklyn Ent. Soc., vol. XIX:125.

B. G. Thompson, 1927, Ore. State Board Hort. 19th Bienn. Rept., page 131.

Occurs in Oregon at high altitudes. Engelhardt found evidence of the work of the larvæ of this species in a plant so far determined only as *Polygonum* sp.

Mt. Hood, IX-5-'17, 2 ♂ ♂, ♀ (F. H. Lathrop); Crater Lake, VIII-22-'21, 3 ♀ ♀ (A. L. Lovett); Crater Lake, VI-30-'26, 100 specimens ♂ ♂ and ♀ ♀ (B. G. T.).

14. SYNANTHEDON FRAGARIÆ Hy. Edw.

Hy. Edwards, 1881, Papilio, vol. I:202.

G. P. Engelhardt, 1924, Bull. Brooklyn Ent. Soc., vol. XIX:126.

This species is not common in Oregon.

Siskiyou, VII-29-'21, ♀ (B. G. T.); Engelhardt reports taking one ♀ at Kirk, Oregon, VIII-5-'23.

15. SYNANTHEDON BEHRENSII Hy. Edw.

Hy. Edwards, 1882, Papilio, vol. II:123.

This species is uncommon in Oregon.

Siskiyou, VII-29-'21, ♀ (B. G. T.).

16. VESPIMINA SEQUOIÆ Hy. Edw.

Hy. Edwards, 1881, Papilio, vol. I:181.

The larvæ of this species attack pine of various species, especially *Pinus ponderosus* and *P. lambertiana*.

La Grande, VII-15-'18, 2 ♂ ♂ and ♀ (B. G. T.); Ashland, VII-10-'27, ♂ and ♀ (H. A. Scullen); Corvallis, VII-26-'18, 2 ♂ ♂ and 1 ♀ (B. G. T.); Bend, VII-1-'18, 10 ♂ ♂ and 3 ♀ ♀ (B. G. T.).

17. MELITTIA GLORIOSA Hy. Edw.

Hy. Edwards, 1880, Bull. Brooklyn Ent. Soc., vol. III:71.

G. P. Engelhardt, 1924, Bull. Brooklyn Ent. Soc., vol. XIX:125.

B. G. Thompson, 1927, Ore. State Board of Hort. 19th Bienn. Rept., page 126.

This is the largest and most beautiful species of the family occurring in Oregon. The larvæ work in the large woody roots of "man in the ground," *Echinocystis oregona*. In Oregon it is recorded only from Corvallis.

Corvallis, VII-27-'23, 2 ♂ ♂ 3 ♀ ♀ (B. G. T.); VII-15-'25, 2 ♂ ♂, 2 ♀ ♀ (B. G. T.); VII-1-to-VIII-10-'26, 25 ♂ ♂ and ♀ ♀ (B. G. T.); July 1 to August 30, 1926, 100 ♂ ♂ and ♀ ♀ (B. G. T.).

18. MEMYTHUS PYRAMIDALIS Wlk.

Walker 1856, Cat. Lep. Brit. Museum, Pt. VIII:40.

Hy. Edwards, 1881, Papilio, vol. I:206.

This species in all its forms has been taken by the writer at Corvallis. The larvæ work in the roots of "fireweed" *Epilobium angustifolium*.

Corvallis, VI-6-'26, 20 ♂ ♂ and ♀ ♀ (B. G. T.); Forest Grove, VI-5-'18, 1 ♀ (M. C. Lane); Rainier, VI-1-'19, 1 ♀ (A. L. Lovett); Alsea, VII-22-'28 ♀ (B. G. T.).

19. PARANTHRENE ROBINIÆ Hy. Edw.

Hy. Edwards, 1880, Bull. Brooklyn Ent. Soc., vol. III:72.

B. G. Thompson, 1927, Ore. State Board of Hort. 19th Bienn. Rept., pages 135-136.

Larvæ of this species work in various willows and poplars.

Pendleton, IX-1-'19 ♀ (B. G. T.); Burns, V-25-'19, 50 specimens ♂ ♂ and ♀ ♀ (B. G. T.); Corvallis, VI-1-'26, 2 ♀ ♀ (B. G. T.).

20. PARANTHRENE PERLUCIDA Busck

Busck, Proc. Ent. Soc. of Washington, vol. XVII:80.

But one specimen of this species has been collected in the state.

McKenzie Pass, VI-10-'26 ♀ (G. R. McGinnis).

OCCURRENCE OF THE EUROPEAN WALNUT APHIS IN OREGON

The dusky-veined walnut aphis,¹ *Callipterus juglandis* Frisch, not heretofore recorded as occurring in the United States, was found to be doing damage to walnuts in the central Willamette Valley last summer (1928). Between two and three thousand acres of walnuts were affected. The infestation centered around Dundee and the section north of McMinnville.

This aphis is much larger than the ordinary walnut aphis, *Chromaphis juglandicola* Kalt. Unlike the ordinary walnut aphis, it works entirely on the upper surface of the leaves. As many as fifty aphids were found on a leaf, located in a double row along the mid-rib and facing the stem end. The mid-ribs of the infested leaves were blackened and shrivelled. The leaves had a sickly appearance and were blotched with yellow.

The first control measures were applied on July 20, 1928, and on this date the wingless forms were the most numerous, but few winged forms being observed. A two per cent nicotine dust thoroughly applied between midnight and 8:00 a. m. gave excellent control. This treatment was applied by most of the growers in the infested area. Dust applied during the day was ineffective, due to windy conditions.—B. G. Thompson.

NOTE ON ANOTIA FITCHI Van D.

A recent and valuable paper by Dr. E. D. Ball on our North American Derbidæ (Can. Ent. LX, 196, 1928) calls for a comment or two. Dr. Ball is undoubtedly correct in placing my *Amalopota fitchi* in genus *Anotia*, but he as certainly is in error in placing it as a synonym of *Anotia venustula* Fowler. In color markings it is quite distinct, and there seems to be a little difference in the shape of the wings and there are other structural characters. I believe these species should be considered as distinct, but, if finally united, the name *fitchi* has priority.—E. P. Van Duzee.

¹ Determined by Dr. P. W. Mason of the United States Bureau of Entomology.